

Claims

1. (currently amended) A germline-competent black ~~B6-ES~~ C57BL/6 ES cell line ~~form~~ from C57BL/6 mouse strain wherein said ES cell line consists consisting of IC1.
2. (currently amended) A germline-competent albino ~~B6-ES~~ C57BL/6 ES cell line from ~~C57BL/6J-Tyr^{e-23}~~ C57BL/6J-Tyr^{c-2J} mouse strain, wherein said ES cell line consists ~~consisting of~~ IAC1.
3. (currently amended) A method of generating a ~~chimeric~~ transgenic C57BL/6 mouse for producing genetically modified C57 mice, wherein said ~~chimeric~~ transgenic mouse comprising:
~~is produced by introducing C57 ES cells with marker genes into blastocysts from the same color strain, and transplanting said blastocysts into a pseudopregnant animal to produce the chimeric mouse which can not be seen by coat color.~~
 - a) introducing a transgene construct that is stably integrated in the genome of C57BL/6 ES cells into blastocysts from the same color strain,
 - b) transplanting said blastocysts into a pseudopregnant animal to produce a chimeric transgenic mouse, and
 - c) breeding the chimeric mouse to produce a homozygous transgenic mouse comprising said transgene construct.
4. (cancelled)
5. (currently amended) A method of introducing albino C57BL/6 ~~B6~~ ES cells

into black ~~B6~~ C57BL/6 blastocysts to produce a white into black combination, said method comprising the steps of:

- a) introducing ~~genetic modification in albino B6~~ a transgene construct into albino C57BL/6 ES cells to produce modified ES cells,
 - b) introducing said modified albino C57BL/6 ES cells into black C57BL/6 blastocysts, ~~B6 ES cells into blastocysts from black C57 strain~~ and transplanting said blastocysts into a pseudopregnant mouse,
 - c) allowing said blastocyst to develop into ~~chimeras~~ chimeric transgenic mouse identified by coat color, and
 - d) breeding said ~~chimeras to produce offspring~~ chimeric transgenic mouse to produce a homozygous transgenic mouse comprising said transgene construct.
6. (currently amended) The method of claim 3 wherein the presence of the transgene ~~chimerism~~ is identified by PCR and Southern Blot, ~~said chimerism being not identifiable by coat color when C57 ES cells are injected into C57 blastocysts of the same color strain.~~
7. (currently amended) The method of claim 3 wherein black ~~B6~~ C57BL/6 ES cells are introduced into black ~~B6~~ C57BL/6 blastocysts to produce a black into black combination.
8. (currently amended) The method of claim 6 wherein black C57BL/6 ~~B6~~ ES cells are introduced into black C57BL/6 ~~B6~~ blastocysts to produce a black into black combination.
9. (cancelled)
10. (cancelled)
11. (cancelled)